#### INTERNATIONAL SEARCH REPORT

Internation No
PCT/IB2004/003310

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12N1/20 C12Q1/68 A61K39/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)
EPO-Internal, Sequence Search, EMBASE, BIOSIS, WPI Data, PAJ

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE EMBL 'Online! 21 October 2001 (2001-10-21), "Bacteroides sp. 0103 800 partial 16S rRNA gene, strain 0103 800" XP002313696 retrieved from EBI accession no. EM_PRO:BSP416906 Database accession no. AJ416906 the whole document	1-3,5,11

Patent family members are listed in annex.		
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone		
"Y" document of particular relevance; the claimed Invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.  "&" document member of the same patent family		
Date of mailing of the international search report  31/01/2005		
Authorized officer Perez, C		

### INTERNATIONAL SEARCH REPORT

International Application No PCT/IB2004/003310

		PCT/IB2004/003310				
C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT						
Calegory °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.				
X	DATABASE EMBL 'Online! 14 January 2001 (2001-01-14), "Tannerella forsythensis gene for 16S rRNA, strain:TR6." XP002313697 retrieved from EBI accession no. EM_PRO:AB053947 Database accession no. AB053947 the whole document	1-3,5,9, 11				
X	WO 03/054755 A (HARDHAM JOHN MORGAN; KRISHNAN RAJENDRA (US); PFIZER PROD INC (US); DR) 3 July 2003 (2003-07-03) page 48, line 30 - page 53, line 24	1-3,5, 11-29				
X	claims 1-15 -& DATABASE Geneseq 'Online! 25 March 2004 (2004-03-25), "Porphyromonas gulae B69 16S rRNA DNA." XP002313698 retrieved from EBI accession no. GSN:ADH52847 Database accession no. ADH52847 the whole document	1-3,5,11				
A	PASTER B J ET AL: "Bacterial diversity in human subgingival plaque" JOURNAL OF BACTERIOLOGY, WASHINGTON, DC, US, vol. 183, no. 12, June 2001 (2001-06), pages 3770-3783, XP002237325 ISSN: 0021-9193 page 3780, left-hand column, paragraph 3 - page 3782, last paragraph	1-35				
Α	WO 99/08691 A (SPACCIAPOLI PETER; NELSON ERIC (US); PERIODINTIX INC (US); FRIDEN PHI) 25 February 1999 (1999-02-25) page 5, line 19 - page 6, line 6 examples 2-4 claims 1-30	1-35				

Form PCT/ISA/210 (continuation of second sheet) (January 2004)

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 5-6, 30-33 completely, 1-4, 11-29 partially

isolated pigmented anaerobic bacterium characterized by a 16S rRNA DNA sequence at least 95 % homologous to SEQ 3, 6, 9, 10 or 13, or a biologically pure culture of said bacteria. An immunogenic composition comprising said bacterium, a vaccine made thereof, and methods for treating, preventing or diagnosing periodontal disease in companion animals

2. claims: 7-8, 34 completely, 1-4, 11-29 partially

same as for invention 1 but with 16S rRNA sequences at least 95 % homologous to SEQ 4.

3. claims: 9-10, 35 completely, and 1-4, 11-29 partially

same as for invention 1 but with 16S rRNA sequences at least 95 % homologous to SEQ 5.

# International application No. PCT/IB2004/003310

### INTERNATIONAL SEARCH REPORT

Box II Observations where certain claims were found unsearchable (Continuation of Item 2 of first sheet)					
This international Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:					
1. X Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:					
Although claim 18 is directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.					
2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful international Search can be carried out, specifically:					
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).					
Box III Observations where unity of Invention is lacking (Continuation of item 3 of first sheet)					
This international Searching Authority found multiple inventions in this international application, as follows:					
see additional sheet					
1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.					
2. X As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.					
As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:					
4. No required additional search fees were timely paid by the applicant. Consequently, this international Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:					
<u>.</u>					
Remark on Protest  The additional search fees were accompanied by the applicant's protest.					
No protest accompanied the payment of additional search fees.					

### **INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No
PCT/IB2004/003310

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
WO 03054755	Α	03-07-2003	BR WO US US	0205775 A 03054755 A2 2003228328 A1 2005010032 A1	03-08-2004 03-07-2003 11-12-2003 13-01-2005
WO 9908691	A	25-02-1999	US AU CA EP JP NO WO	6153210 A 9017898 A 2301065 A1 1011693 A1 2001515042 T 20000688 A 9908691 A2	28-11-2000 08-03-1999 25-02-1999 28-06-2000 18-09-2001 15-03-2000 25-02-1999